

PUBLIC ADDRESS SYSTEM

HPA-9800 series

Public Address General Emergency Alarm System is designed for general announcing with advanced technology and complies with IMO regulation III/6.5 & Res. MSC.47(66)/Circ.808 performance standards.

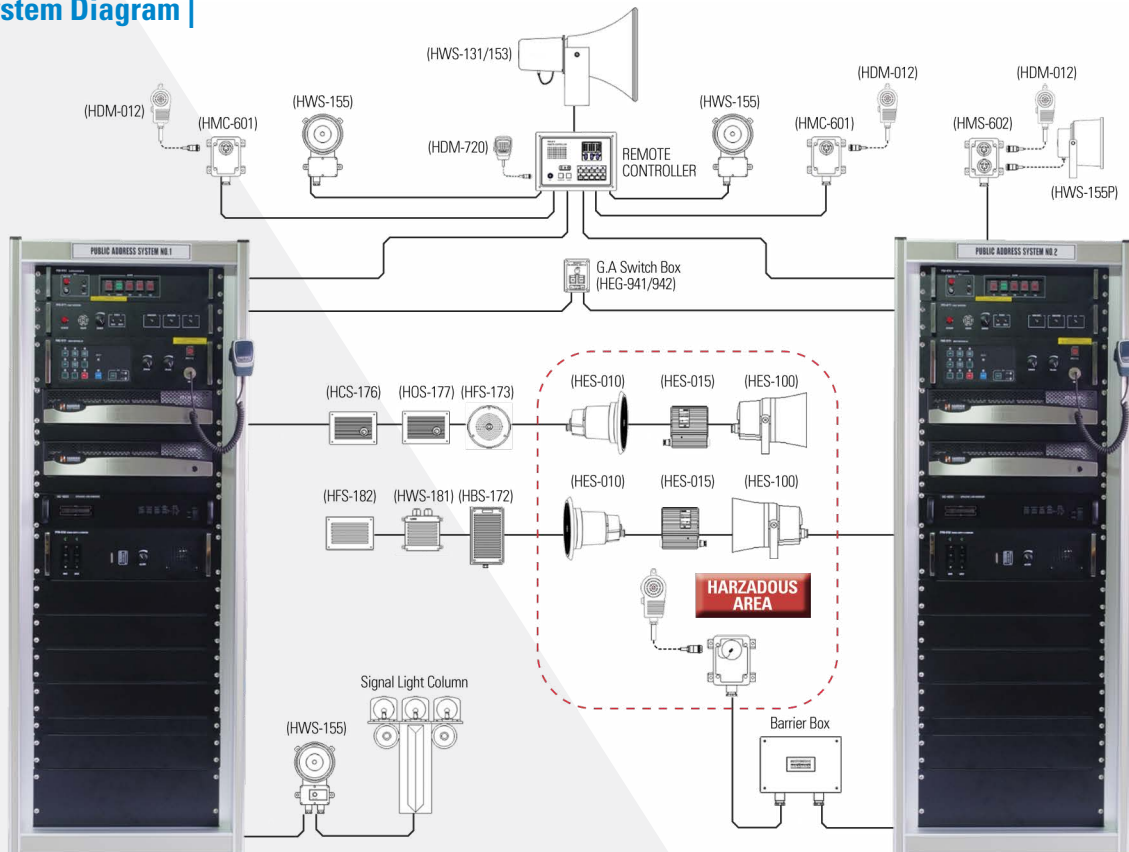
This system is also specially made to keep good performance under the harsh environment of vessel at sea and especially off shore marine plant. For this system, paging function through auto telephone exchanger and combined talk back function are available. Interfacing with external general emergency alarm, fire alarm, signal column light, air horn, VDR and fail alarm monitoring system are also available.

Type Approval by DNV GL and RINA

| System Feature |

- Perfect duplication system (A-B System)
- Flexible choice of output power and installation space
- Reliable and durable performance
- Simple installation and easy maintenance
- Convenient control with microprocessor and diode matrix
- Automatic main/em'cy power changeover

| System Diagram |



PUBLIC ADDRESS SYSTEM

LOUD&CLEAR

| System Specification |

HPA-9800 Main Unit



- Dual type (A-B) system
- Output : 1,500W~9,000W
- Remote controller : Standard 6 ea (Extension : 15ea)
- Line checker
- Alarm generator
 - General emergency alarm
 - Fire alarm
 - CO₂ smoke alarm
 - Gas alarm
 - etc.
- GA muting
- Announcing priority : 18 class
- Auto-telephone paging call (all, group-1, group-2)
- Automatic main/em'cy power changeover
- Fault detector (system check)
- Operating temperature & humidity : -5°C ~ +60°C, 95%
- Frequency characteristic : 50Hz~15kHz
- Distortion : less than 0.5%
- S/N Ratio : more than 70dB
- Power source : AC110/220V, 50/60Hz
- Dimension(W x D x H mm) : 600 x 750 x 1565



HBC-210 Remote Controller

- Call signal : 800Hz
- Microphone with volume
- Speaker selector : 9 group
- Dimmer : Speaker selector lamp brightness
- Monitor speaker with volume
- Flush or Wall mounting type
- Dimension(W x D x H mm) : 275 x 110 x 200

PUBLIC ADDRESS SYSTEM

HPA-9700 series

Public Address with Talkback System is designed for general announcing with advanced technology and complies with IMO regulation III/6.5 & Res. MSC.47(66) performance standards.

This system is also specially made to keep good performance under the harsh environment of vessel at sea.

For this system, paging function through auto telephone exchanger and talk-back function are available.

Interfacing with external general emergency alarm, fire alarm, air horn and signal light column are also available.

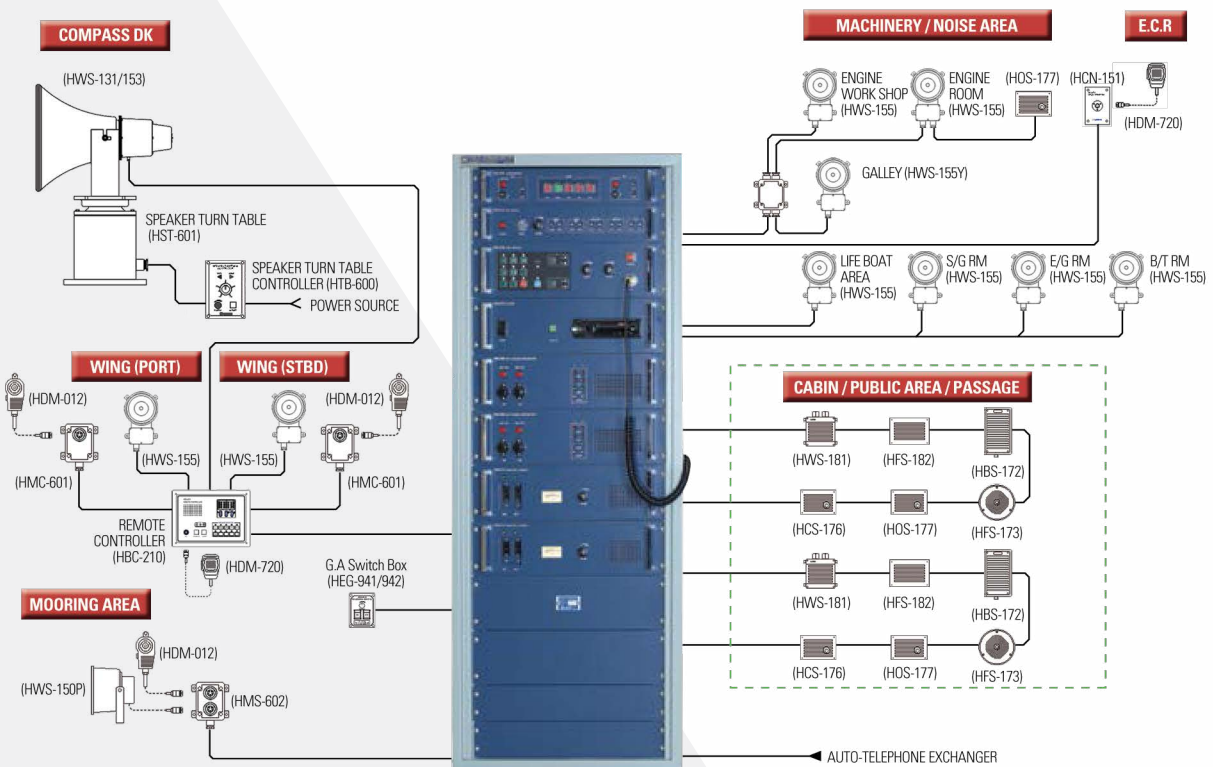
Registered in a patent for uninterrupted dual public address system by Korean Intellectual property office on 2003.

Type Approval by DNV GL, RINA and CCS

| System Feature |

- Flexible choice of output power and installation space
- Reliable and durable performance
- Simple installation and easy maintenance
- Convenient control with microprocessor and diode matrix
- Automatic main/em'cy power changeover
- Automatic main/sub amplifier changeover in dual system

| System Diagram |



PUBLIC ADDRESS SYSTEM

LOUD&CLEAR

| System Specification |

HPA-9700 Main Unit



- Single/Dual system
- Single/Dual rack type
- Output : 200W~2,000W
- Remote controller : Standard 6ea (Extension : 36ea)
- Master & Slave changeover/Two amp. run type
- Alarm generator : option
 - General emergency alarm
 - Fire alarm
 - CO₂ smoke alarm
 - Gas alarm
 - etc.
- GA muting
- Announcing priority : 12 class
- Auto-telephone paging call (all, group1, group2)
- Automatic main/em'cy power changeover
- Fault detector (system check)
- Operating temperature & humidity : -5°C ~ +55°C , 95%
- Frequency characteristic : 120~12000Hz within±6dB
- Distortion : less than 0.5%
- S/N Ratio : more than 55dB
- Power source : AC110/220V, 50/60Hz & DC24V
- Dimension(W x D x H mm) : 585 x 450 x 1500
(single rack/800W dual system)



HBC-210 Remote Controller

- Call signal : 800Hz
- Microphone with volume
- Speaker selector : 9 group
- Dimmer : Speaker selector lamp brightness
- Monitor speaker with volume
- Flush or Wall mounting type
- Dimension(W x D x H mm) : 275 x 110 x 200

PUBLIC ADDRESS SYSTEM

HPA-7300 series

Public Address with Talkback System is designed for general announcing with advanced technology and complies with the IMO regulation III /6.5 & Res. MSC.47(66) performance standards.

This system is also specially made to keep good performance under the harsh environment of vessel at sea.

For this system, paging function through auto telephone exchanger and combined talk back function are available.

CE mark(EMC) by DNV GL

| System Feature |

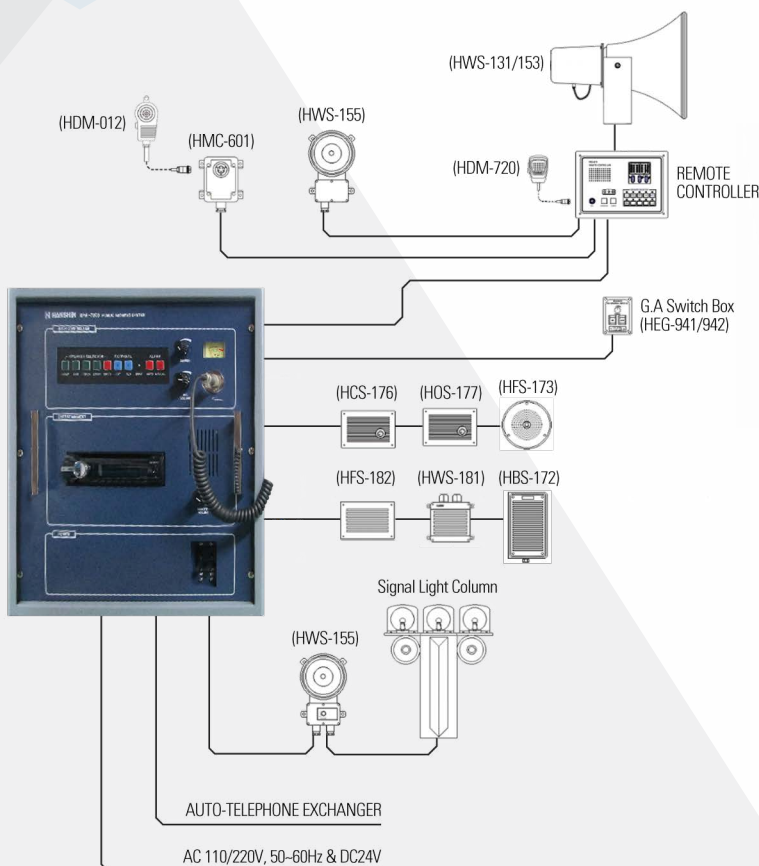
- Reliable and durable performance
- Simple installation and easy maintenance
- Convenient control with microprocessor and diode matrix
- Automatic main/em'cy power changeover



HPA-7300 Main Unit

- Single type system
- Output : 200W, 400W
- Remote controller : option(max. 2ea)
- Announcing priority : 9 class
- Automatic main/em'cy power changeover
- Operating temperature & humidity : -5°C ~ +55°C , 95%
- Power source: AC 110/220V, 50/60Hz & DC24V
- Dimension(W x D x H mm) : 430 x 300 x 450

| System Diagram |



HBC-310 Remote Controller

- Call signal : 800Hz
- Microphone with volume
- Speaker selector : 5 group
- Dimmer : Speaker selector lamp brightness
- Monitor speaker with volume
- Dimension(W x D x H mm) : 275 x 110 x 200

PUBLIC ADDRESS SYSTEM

LOUD&CLEAR

HPA-6100

HPA-6100 Series Public Addressor miniaturized to fit a small craft with latest technology.

It was made in order to keep its performance under the harsh environment of the vessel at sea.

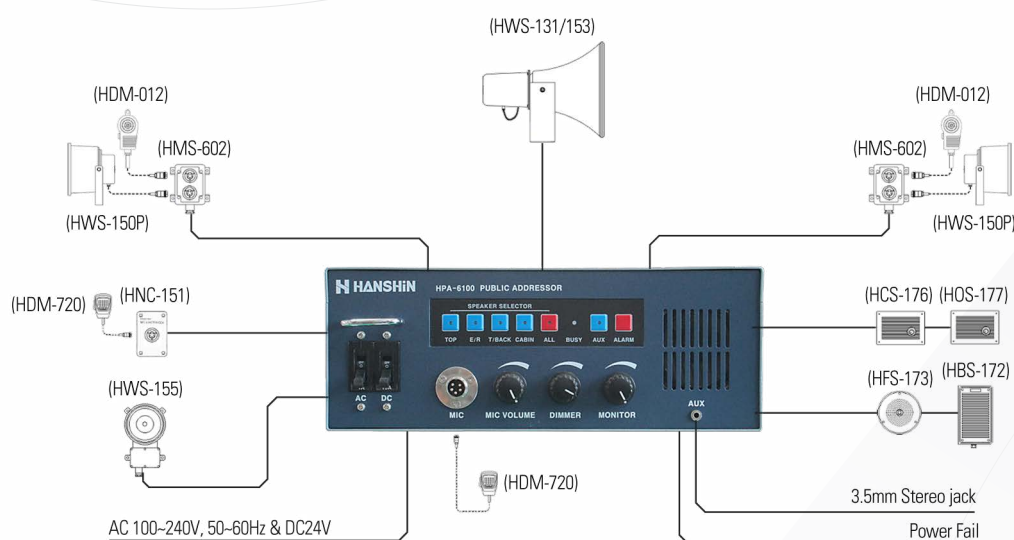
It is useable for general broadcasting and talk-back.

| System Feature |

- Miniaturization
- Self-protection circuit of Power amplifier unit
- Easy installation and Easy maintenance
- Aux. input for AM/FM radio CD&MP3 player



| System Diagram |







| System Specification |





- Desk / Flush type
- Output : 100W
- Automatic main/em'cy power changeover
- Announcing priority : 5 class
- Talkback : 2 lines
- Operating temperature & humidity : -5°C ~ 55°C, 95%
- Power source : AC100~240V, 50~60Hz & DC24V
- Dimension(W x D x H mm) : 364 x 343 x 170 (Desk)
360 x 342 x 160 (Flush)

PUBLIC ADDRESS SYSTEM


ACCESSORIES

MODEL	HWS-133	HWS-153	HWS-131	HWS-155 / 155A2
WATER TIGHT SPEAKER				
MOUNTING TYPE	WALL	WALL	WALL	WALL
OUTPUT	200W / 300W / 400W / 600W	75W / 100W / 150W	30W / 50W	5W / 10W / 15W / 20W
IP GRADE	IP56	IP56	IP56	IP56
DIMENSION (WxDxH mm)	385 x 260 x 450	Ø390 x 488	Ø320 x 350	168 x 148 x 296
MATERIAL	ALUMINUM, SUS	ALUMINUM, STEEL	ALUMINUM, STEEL	POLYETHYLENE

MODEL	HWS-150PB	HWS-155AV / AV2 / BV2	HWS-181	HWS-182
WATER TIGHT SPEAKER				
MOUNTING TYPE	PORTABLE	WALL	WALL	FLUSH
OUTPUT	10W	5W / 10W	1W / 2W / 5W	1W / 2W
IP GRADE	IP56	IP56	IP56	IP56
DIMENSION (WxDxH mm)	181 x 151 x 199	170 x 148 x 296	180 x 75 x 179	195 x 105 x 135
MATERIAL	POLYETHYLENE	POLYETHYLENE	ABS	ABS

MODEL	HFS-173	HBS-172	HCS-176	HOS-177
CABIN & PASSAGE SPEAKER(N.W.T)				
MOUNTING TYPE	CEILING	BOTH SIDE	CEILING	ONESIDE WALL
OUTPUT	1W / 2W / 5W	2W / 5W	1W / 2W / 5W	2W / 5W
IP GRADE	IP20	IP20	IP20	IP20
DIMENSION (WxDxH mm)	Ø175 x 98	210 x 85 x 125	195 x 69 x 135	195 x 68 x 135
MATERIAL	POLYETHYLENE	ABS	ABS	ABS





MODEL	HES-020	HES-050
Ex. TYPE SPEAKER		
MOUNTING TYPE	WALL	WALL
OUTPUT	20W	50W
TYPE OF PROTECTION	Ex d IIC T6	Ex d IIC T6
IP GRADE	IP56	IP56
DIMENSION (WxDxH mm)	158 x 240 x 224	404 x 494 x 382
MATERIAL	ALUMINUM	ALUMINUM






MODEL	MFD-178
METAL FIRE DOME	
MOUNTING TYPE	CEILING
DESCRIPTION	for HFS-173
TEST STANDARDS	IMO Res. MSC. 307(88):2010
FIRE RESISTANCE	B0 CLASS
DIMENSION	Ø168 x 116
MATERIAL	STEEL 1.2T




PUBLIC ADDRESS SYSTEM

ACCESSORIES

LOUD&CLEAR

MODEL	HMC-601	HMC-601A / B	HMS-602A / B	HJB-902 / 903 / 904
WATER TIGHT JUNCTION BOX				
MOUNTING TYPE	FLUSH	WALL	WALL	WALL
IN USE	MICROPHONE	MICROPHONE	MICROPHONE	-
IP GRADE	IP56	IP56	IP56	IP56
DIMENSION (WxDxH mm)	120 x 46 x 160	155 x 112 x 190	157 x 112 x 190	155 x 80 x 230
MATERIAL	UNSATURATED POLYESTER	UNSATURATED POLYESTER	UNSATURATED POLYESTER	UNSATURATED POLYESTER

MODEL	HEG-941D	HEG-941F	HEG-941W	HEG-942F	HEG-942W
G.E.A SWITCH BOX (N.W.T)					
MOUNTING TYPE	FLUSH	FLUSH	WALL	FLUSH	WALL
DESCRIPTION	AUTO / MANUAL	AUTO / MANUAL	AUTO / MANUAL	AUTO	AUTO
DIMMER	0	X	X	X	X
IP GRADE	IP20	IP20	IP20	IP20	IP20
DIMENSION (WxDxH mm)	80 x 90 x 120	80 x 73 x 120	80 x 60 x 120	80 x 87 x 120	80 x 60 x 120
MATERIAL	STEEL	STEEL	ABS	STEEL	ABS

MODEL	HEG-941W	HEG-942W	MODEL	HCN-151	HCN-251
G.E.A SWITCH BOX (W.T)			MICROPHONE JUNCTION BOX		
MOUNTING TYPE	WALL	WALL	MOUNTING TYPE	FLUSH	FLUSH
DESCRIPTION	AUTO / MANUAL	AUTO	IN USE	MICROPHONE	MICROPHONE
DIMMER	X	X	IP GRADE	IP20	IP20
IP GRADE	IP66	IP66	DIMENSION (WxDxH mm)	80x 79 x 120	80 x 72 x 120
DIMENSION (WxDxH mm)	185 x 90 x 177	185 x 90 x 177	MATERIAL	STEEL	STEEL
MATERIAL	ABS	ABS, POLYESTER			

MODEL	HDM-012	HDM-720
MICROPHONE		
MOUNTING TYPE	HANDY	HANDY
CABLE CORD	0.75m / 5m / 10m / 15m / 20m / 25m / 30m	
IP GRADE	IP66	IP20
DIMENSION (WxDxH mm)	65 x 47 x 145	58 x 32 x 94
MATERIAL	ABS	ABS